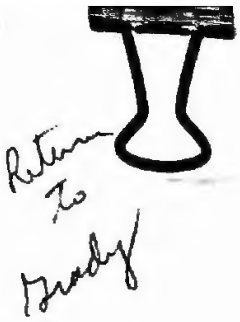

DOCKETED

FILED

MAY 17 1973

H. STUART CUNNINGHAM
CLERK

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

THE MAGNAVOX COMPANY, a Corporation, and SANDERS ASSOCIATES, INC. a Corporation,	)	
Plaintiffs,	)	Consolidated Civil Actions 74 C 1030 74 C 2510 75 C 3153 75 C 3933
v.	)	
BALLY MANUFACTURING CORPORATION, a Corporation, et al.,	)	
Defendants.	)	

BRIEF IN SUPPORT OF MOTION

FOR SUMMARY JUDGMENT

APPENDIX

	Page No.
Pages 3, 9-13 of Deposition of Richard I. I. Seligman, taken April 7, 1976	1-6
U.S. Patent 2,847,661 (Althouse)	7-22
Declaration, Power of Attorney, and Assent of Assignee (Baer, Rusch, Harrison)	23-27
Pages 69-72 of Deposition of Ralph Baer taken February 17, 1976	28-32
Page 144 from file wrapper 3,659,284 Patent	33
Chart Comparing Claim 1 of '480 Patent With Claim 92 of '284 Patent	34
Final Rejection dated September 16, 1971 in Application Serial No. 828,154	35-37
Amendment After Final Rejection Received in Patent Office November 12, 1971, in Application Serial No. 828,154	38-41
Pages 2-5 of Office Action dated March 29, 1971 in Application Serial No. 828,154	42-45
Office Action Dated April 26, 1971 in Application Serial No. 851,865	46-48
Amendment B in Application Serial No. 851,865	49-52
Amendment B in Application Serial No. 828,154	53-55
Citation of Reference Received in Patent Office February 2, 1972, in Application Serial No. 126,966	56-60
Amendment A in Application Serial No. 126,966	61-64
Pages 47-49 of Deposition of Richard I. Seligman taken April 8, 1976	65-68
Prosecution History of Claims Leading to Claim 1 of U.S. Patent 3,728,480	69

TABLE OF CONTENTS

		Page No.
I.	INTRODUCTION	
	A. General	1
	B. Subject Matter of the Patents in Suit	2
II.	GROUNDS FOR THE MOTION	
	A. 35 U.S.C. §102(b) and Althouse Patent 2,847,661	3
	B. Materiality of the Althouse Patent	4
	C. Sanders' Knowledge of the Althouse Patent	6
	D. Prosecution History of the '480 Patent Claims	8
III.	ARGUMENT	
	A. The '480 Patent was Obtained by Fraud and Inequitable Conduct	10
	B. Fraud or Inequitable Conduct in Obtaining any Claim of the '480 Patent Renders the Entire Patent Invalid and Unenforceable	12
	C. The Fraud or Inequitable Conduct of Sanders in Obtaining the '480 Patent Also Renders the '284, '285, Re.'507 and Re. '598 Patents Unenforceable	13
	D. Summary Judgment is Appropriate in this Case	14
	E. Sears and Atari are Entitled to Attorney's Fees	15
IV.	CONCLUSION	15

Table of Authorities

	Page No.
Statutes	
35 U.S.C. §102(b)	1, 3, 6, 11
35 U.S.C. §112	2
35 U.S.C. §285	15
Rules	
Fed. R. Civ.P. 56 (c)	14, 15
Cases	
Armour and Co. v. Wilson & Co., Inc., 168 F. Supp. 353 (N.D. Ill, 1958), reversed on other grounds 274 F.2d 143 (7th Cir. 1960)	13
Beckman Instruments, Inc. v. Chemtronics, Inc., 428 F.2d 555, (5th Cir. 1970)	10, 11
Buzzelli v. Minnesota Mining & Mfg. Co., 182 USPQ 307 (E.D. Mich. 1974)	10
East Chicago Machine Tool Corp. v. Stone Container Corp. et al., 181 USPQ 744 (N.D. Ill. 1974)	12, 13
Kearney & Trecker Corp. v. Giddings & Lewis, Inc., 452 F.2d 579 (7th Cir. 1971), cert. denied 405 U.S. 1066, (1972)	12
Keystone Driller Co. v. General Excavator Co., 290 U.S. 240 (1930)	13
Marconi Wireless Telegraph v. United States, 320 U.S. 1 (1943)	12
Monsanto Co. v. Rohm & Haas Co., 312 F. Supp. 778 (E.D. Pa. 1970) affirmed 456 F.2d 592 (3rd Cir. 1972), cert. denied 407 U.S. 934 (1972)	10, 11
Pfizer Inc. v. International Rectifier Corp., 186 USPQ 511 (D. Minn. 1975)	10, 11, 14

Page No.

Plantronics, Inc. v. Roanwell Corp., 185 USPQ 505 (S.D. N.Y. 1975)..... 13, 14

Precision Instruments Mfg. Co. v. Automotive Maintenance Machine Co., 324 U.S. 806, (1945), rehearing denied 325 U.S. 893 (1944)..... 10

Proler Steel Corp. v. Luria Bros. & Co., 417 F.2d 272, 273 (9th Cir. 1969)..... 14, 15

Research Corp. v. Nasco Industries, Inc., 501 F.2d 358 (7th Cir. 1974), cert.denied 419 U.S. 1096 (1974)..... 14

Saxton Products, Inc. v. U.S. Telegraph Co., 182 USPQ 608 (S.D. N.Y. 1974)..... 13

Strassheim Co. v. Gold Metal Furniture Co., 477 F.2d 818 (7th Cir. 1973)..... 15

Technograph Printed Circuits Ltd. v. Methode Electronics Inc., 356 F.2d 442, (7th Cir. 1966)..... 14

Turzillo v. P & Z Mergentime, ___ F.2d ___ (April 8, 1976) D.C.Cir. 1976)..... 11

I. INTRODUCTION

A. General

These consolidated actions are directed to the validity and infringement of three original United States patents and reissues of two of those patents [Patent Nos. 3,728,480; 3,659,284 (Reissued as Re. 28,507) and 3,659,285 (Reissued as Re. 28,598)]. Sanders Associates, Inc. (hereinafter Sanders) is the owner and The Magnavox Company (hereinafter Magnavox) is the exclusive licensee of all the patents in suit.

The instant motion is directed first, to the invalidity under 35 U.S.C. §102(b) of one of these patents namely U. S. patent No. 2,728,480, issued April 17, 1973 in the name of Ralph H. Baer and assigned to Sanders Associates, Inc. (the '480 patent). Secondly, this motion is directed to a fraud perpetrated by Sanders on the United States Patent Office during the prosecution of the '480 patent and its parent application (Serial No. 697,798 hereinafter the '798 application).

That fraud is based upon the complete lack of candor and honesty in dealing with the Patent Office in that Sanders withheld a prior art patent reference (Althouse patent No. 2,847,661) from the Patent Office Examiner handling the application for the '480 patent. The Althouse patent and its specific relevance to the '480 patent application was well known to Sanders at that time. Althouse had been cited by a different Examiner handling the other original patents here in suit,

3,659,284 (hereinafter '284) and 3,659,285 (hereinafter '285) and had been thoroughly discussed by Sanders in amendments and other communications relating to the '284 and '285 patents.

B. Subject Matter of the Patents in Suit

The '480 patent was issued upon an application (Serial No. 126,966) filed in the Patent Office by Sanders on March 22, 1971 as a continuation of its earlier parent application (the '798 application) which was filed in the Patent Office on January 15, 1968.

As required by 35 U.S.C. §112, the alleged invention of the '480 patent has been set forth in a number of claims. As defined in those claims, and Claim 1 is used here only by way of example, the alleged invention includes in combination with a standard television receiver:

A. apparatus for generating "dots" upon the screen of the receiver to be manipulated by a participant, comprising:

1. a control unit for generating signals representing the "dots" to be displayed, said control unit further including:

(a) means for generating synchronizing signal (sic) to synchronize the television raster scan of said receiver and,

(b) means for manipulating the position of the dots on the screen of said receiver; and

2. means for directly coupling the generated signals only to said television receiver whereby said "dots" are displayed only upon the screen of said receiver being viewed by the participant.

More simply, the invention includes some form of apparatus for generating dots on the screen of a television receiver together with some means for a participant to move those dots.

The other patents '284 and '285 and their respective reissue patents, '507 and '598 also pertain to this same general type of apparatus for generating and manipulating dots on a television screen.

All of the applications leading to the patents in suit were prepared and prosecuted by Richard I. Seligman, an employee and patent attorney of Sanders (see Seligman deposition, pages 1, 9-13, Appendix 1-6).

II. GROUNDS FOR THE MOTION

A. 35 U.S.C. §102(b) and Althouse Patent 2,847,661

Insofar as it pertains to this motion, Title 35 United States Code, Section 102(b) provides as follows:

> "§102. Conditions for Patentability; novelty and loss of right to patent
>
> "A person shall be entitled to a patent unless --
>
> ..." (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or ..."

As noted above, the application on which the '480 patent issued was a continuation of an application filed in the Patent Office on January 15, 1968. Consequently, any patenting or description of the invention in a printed publication prior to January 15, 1967 renders the '480 patent completely invalid. The Althouse patent (Appendix 7-22) was issued on August 12, 1958, and as discussed hereinafter, contains a complete description of the invention claimed in the '480 patent.

B. Materiality of the Althouse Patent

The materiality of the Althouse patent can be recognized from several different approaches. In the first instance Althouse generally describes his invention as being capable of displaying a number of spots on a television type display (Appendix 17, col. 1, ll. 54-62) and of causing those spots to be moved across the face of the screen (Appendix 20, col. 8, ll. 38-42).

Secondly, the materiality of Althouse can be seen from a direct comparison of that patent with Claim 1 of the '480 patent. Such a direct comparison is set forth in the attached affidavit of Edward S. Wright wherein every element of said Claim 1 is shown to be present in the Althouse patent. While it might have been argued that Althouse does not show or describe a standard television receiver as that term is used in Claim 1 it must be recognized that Magnavox and Sanders

have taken the position that, as used in the patents in suit, that term encompasses any cathode ray tube display incorporating circuitry for a raster type scan - exactly what is shown in Althouse. This definition is succinctly stated by the inventor of the '480 patent, Ralph Baer, in a declaration filed in support of the application for reissue of the '285 patent (Appendix 23-27 at 24):

> "... in the context of my invention and in the context of the description thereof in said Letters Patent 3,659,285 I have always understood and believed 'television receiver' and 'standard television receiver' to mean any cathode ray tube display incorporating circuitry for a raster type scan,..."

Moreover, relative to the '480 patent, Mr. Baer stated in his deposition of February 17, 1976 (see pages 1, 69-72, Appendix 28-32) that TV sets and raster scan displays are synonymous (Appendix 32, ll. 3-6).

With this insight to the term "television receiver" the comparison of Althouse to Claim 1 of the '480 patent is complete as set forth in the attached affidavit of Edward S. Wright.

While the above methods of showing the relevance and pertinency of the Althouse patent are compelling, a still more convincing proof of that relevancy is Sanders' own action in the prosecution of the above mentioned '284 patent before the Patent Office. The '284 patent application included Claim 92 added by Sanders at page 13 of an amendment filed July 3, 1971 (Appendix 33). Claim 92 of the '284 application

remarkably similar to Claim 1 of the '480 patent. While the specific language of the two claims differs slightly it is clear from the attached comparison chart (Appendix 34) that every element of Claim 1 of the '480 patent is found in Claim 92 of the '284 application. In fact, Claim 92 is not even as broad as Claim 1 (Appendix 34).

Even so, on September 16, 1971 the Patent Office Examiner handling the '284 application, Mr. David L. Trafton, stated at page 3 of his Office Action (Appendix 35-37), "Claim 92 is rejected under 35 U.S.C. §102, as anticipated by Althouse. Elements 40 provide the control signals. Elements 57 will operate upon the symbol between its range limits."

Sanders capitulated to the Examiner's rejection in a paper dated November 10, 1971 signed by Mr. Seligman, wherein he states at page 3 "Claims 43, 77 to 80, 91, 92 and 106 have been cancelled without prejudice and without intent to disclaim any portion of the invention." (Appendix 38-41)

C. Sanders' Knowledge of the Althouse Patent

The Althouse patent came to the attention of Sanders in an Office Action dated March 29, 1971 in the '284 application. (Appendix 42-45) Althouse was also cited in an Office Action dated April 26, 1971 in the '285 application. (Appendix 46-48) Although prosecuted at Sanders by the same attorney, Richard I. Seligman, the '284 and '285 applications were assigned to a different Examiner than was the '480 application.

'284 and '285 applications were both examined by Examiner Trafton in Art Unit 234, while the applications leading to the '480 patent were assigned to Examiners Stout, Griffin and Murray in Art Unit 233. It appears that only Examiner Trafton was aware of the Althouse patent.

The awareness of Mr. Seligman, and therefore Sanders, of the Althouse patent is evidenced by the discussion of that patent in amendments dated July 7 and 21, 1971 in response to the Office Actions in the '285 and '284 applications, respectively. (Appendix 49-52 and 53-55) The discussion of Althouse at page 23 of the July 21 amendment in the '284 application shows that Mr. Seligman was fully cognizant of the teaching of Althouse with respect to participant controlled positioning and display of dots on a raster scan display. (Appendix 53-55, at 54):

> "Althouse is merely directed to the positioning and display of small rectangular spots on a CRT raster display representing coordinate data points. He only moves the spots around to position them and he never has any cooperation between plural spots."

The Althouse patent was cited again by Examiner Trafton in the '284 and '285 applications in Office Actions dated September 16, 1971 and September 14, 1971, respectively. As set forth above, in the '284 application, Claim 92 which was substantially identical to Claim 1 of the '480 patent, was rejected as fully anticipated by Althouse; and Sanders capitulated to this rejection in an amendment dated November 10, 1971 (Appendix 38-41).

Sanders, through Mr. Seligman, thereafter continued to prosecute Claim 1 in the '480 application without ever calling Althouse to the attention of the Examiners handling the '480 patent.

More than two years elapsed between the time the Althouse patent was first cited in the '284 application and the issuance of the '480 patent. During this time, Mr. Seligman filed a prior art statement dated January 28, 1972 (Appendix 56-60) and an amendment on October 18, 1972 (Appendix 61-64) in the '480 application. Neither of these documents mentioned the Althouse patent.

In his deposition, Mr. Seligman offered no real explanation for his failure to call the Althouse patent to the attention of the Examiners in the '480 application. He merely said he had no recollection of the patent and assumed that he felt it wasn't relevant. (Appendix 65-68)

D. Prosecution History of the '480 Patent Claims

Throughout the prosecution of the '480 application and the abandoned parent application (Serial No. 697,798), Mr. Seligman distinguished over the prior art cited by the Examiner by relying on elements in the '480 application which were also found in the Althouse patent. Copies of Claim 1 of the '480 patent, as originally filed and as subsequently amended in the parent and continuation applications, are provided at page 69 of the appendix. Language added by an amendment

application is underscored and language deleted by an amendment or application is enclosed in brackets.

As originally presented in the parent application, Claim 1 simply called for a control unit for generating signals representing dots to be displayed and means for coupling the generated signals to a television receiver. Before being allowed, the claim was amended to define the control unit as including means for manipulating the position of the dots on the screen and means for synchronizing a raster scan, two fundamental elements of the Althouse device. (See attached affidavit of Edward S. Wright).

Upon the filing of the continuation application, Claim 1 was further modified to specify that generated signals are coupled to only one television receiver whereby the dots are displayed only upon the screen being viewed by the participant -- another feature of Althouse. Prior to allowance, and subsequent to Mr. Seligman's learning of Althouse, Claim 1 was amended by Mr. Seligman to further define the control unit as including means for generating synchronizing signals to synchronize the raster scan of the television receiver and to further specify that the generated signals are coupled directly to the receiver. Both of these features are found in Althouse. (See attached Affidavit of Edward S. Wright).

I. ARGUMENT

A. The '480 patent was obtained by fraud and inequitable conduct

A patent applicant has an uncompromising duty of absolute candor and full and complete disclosure to the Patent Office of all facts which may be relevant to an issue of patentability. The courts have found anything less to be fraudulent or inequitable conduct in procuring patent rights. Precision Instrument Mfg. Co. v. Automotive Maintenance Machine Co., 324 U.S. 806 (1945) rehearing denied 325 U.S. 893 (1944). The requirement of absolute candor and full and complete disclosure precludes the withholding of material prior art, facts and beliefs from the Patent Office, as well as the affirmative misrepresentation of material prior art, facts and beliefs to the Patent Office. Beckman Instruments Inc. v. Chemtronics, Inc., 428 F.2d 555 (5th Cir. 1970); Monsanto Co. v. Rohm & Haas Co., 312 F.Supp. 778 (E.D.Pa. 1970), aff'd 456 F.2d 592 (3d Cir. 1972) cert. denied 407 U.S. 934 (1972).

An applicant's failure to cite to the Patent Office the prior art most material and relevant to the subject matter claimed renders the patent invalid and unenforceable. Buzzelli v. Minnesota Mining & Mfg. Co., 182 U.S.P.Q. 307 (E.D. Mich. 1974); and Pfizer Inc. v. International Rectifier Corp., 186 U.S.P.Q. 511 (D. Minn 1975).

Materiality under Beckman and Monsanto, supra, does not require that the patent would not have issued as a matter of law "but for" the misrepresentation or concealment, but only that the misrepresentation or withholding be relevant to an issue of patentability. Pfizer, supra, and cases cited therein.

As recently stated by the Court of Appeals for the District of Columbia circuit in Turzillo v. P & Z Mergentime, ____ F.2d ____ (April 8, 1976) (D.C.Cir. 1976):

> "Obviously, duty to disclose to the patent office arises for matters that are relevant even though the applicant feels they do not establish anticipation. Indeed any disclosure would be routinely coupled with an explanation as to why it does not constitute anticipation."

In failing to call the Althouse patent to the attention of the Examiner in the '480 application, Sanders has clearly withheld material prior art from the Patent Office. As discussed above, this patent fully anticipates the alleged invention of the '480 patent in suit and renders the patent totally invalid under 35 U.S.C. §102(b). The Althouse patent was in the possession of Mr. Seligman for more than two years before the '480 patent issued, and Mr. Seligman was fully cognizant of its pertinence to the '480 claims, as evidenced by the characterization of Althouse in the amendment dated July 21, 1971 in the application for the '284 patent (Appendix 53-55 at 54):

"Althouse is merely directed to the positioning and display of small rectangular spots on a CRT raster display representing coordinate data points. He only moves the spots around to position them and he never has any cooperation between plural spots."

Of course, Claim 1 of the '480 patent likewise makes no reference to any cooperation between plural spots.

Even after the Althouse patent came to his attention, Mr. Seligman continued to distinguish patents cited by the Examiner in the '480 application on the basis of elements from Althouse such as synchronization of a raster scan and direct coupling to a television receiver. In East Chicago Machine Tool Corp. v. Stone Container Corp., et al 181 U.S.P.Q. 744 (N.D. Ill. 1974), modified 185 U.S.P.Q. 210 (1974), the Court noted that such distinctions could not have been made by one who had knowledge of the prior art concealed by the applicant.

Under the circumstances, there can be no doubt that Sanders is guilty of fraud and inequitable conduct in obtaining the '480 patent.

B. Fraud or inequitable conduct in obtaining any claim of the '480 patent renders the entire patent invalid and unenforceable

It is well settled that fraud or inequitable conduct in obtaining one claim of a patent renders the entire patent invalid and unenforceable. Marconi Wireless Telegraph v. United States, 320 U.S. 1 (1943); Kearney & Trecker Corp. v. Giddings & Lewis Inc., 452 F.2d 479 (7th Cir. 1971), cert. denied 405 U.S. 1066 (1972); and East Chicago Machine Tool, supra.

Although only one of the claims of the '480 patent has been taken as an example and is discussed in this brief, the fraud and inequitable conduct of Sanders in obtaining this claim renders the entire patent invalid and unenforceable.

C. The fraud or inequitable conduct of Sanders in obtaining the '480 patent also renders the '284, '285, Re. '507 and Re. '598 patents unenforceable

In Keystone Driller Co. v. General Excavator Co., 290 U.S. 240 (1930), fraud or inequitable conduct in enforcing one patent in an earlier action was held to preclude enforceability of that patent and several related patents in a later action. This Court has followed the Keystone decision in cases involving two or more patents pertaining to related subject matter, one of which was obtained by fraud or inequitable conduct before the Patent Office. See East Chicago Tool Corp. v. Stone Container Corp., supra; Armour & Co. v. Wilson & Co., Inc., 168 F.Supp. 353 (N.D.Ill. 1958), rev'd on other grounds 274 F.2d 143 (7th Cir. 1960). In these cases, the fraud or inequitable conduct in obtaining the one patent rendered all of the patents in suit unenforceable. In Armour, the Court explained its reasoning as follows (supra, 168 F.Supp. at 363):

> "9. The Bunding patent is unenforceable against defendant because plaintiff did not come with clean hands in respect of any cause of action in this case in view of the mispropriety of the prosecution of the Thompson patent in the Patent Office."

The present case should not be confused with cases such as Plantronics, Inc. v. Roanwell Corp., 185 U.S.P.Q. 505 (S.D.N.Y. 1975); and Saxton Products, Inc. v.

Telegraph Co., 182 U.S.P.Q. 608 (S.D.N.Y. 1974), in which none of the patents in suit were obtained by fraud or inequitable conduct, although the patentees did own other patents - not in suit - on related subject matter which were wrongfully obtained. As the court noted in Plantronics, supra, 506, "There can be no defense based on 'Misuse in the air'. The misuse must be of the patent in suit."

In the instant case, the fraudulently obtained '480 patent is one of the patents in suit. These patents all pertain to closely related subject matter. Under these circumstances, the inequitable conduct of Sanders in obtaining the '480 patent also renders the '284, '285, Re. '507 and Re. '508 patents unenforceable.

D. Summary judgment is appropriate in this case

Rule 56(c) of the Federal Rules of Civil Procedure authorizes summary judgment to invalidate a patent. Technograph Printed Circuits Ltd. v. Methode Electronics Inc., 356 F.2d 442 (7th Cir. 1966), cert. denied 384 U.S. 950 (1966); Research Corp. v. Nasco Industries Inc., 501 F.2d 358 (7th Cir. 1974), cert. denied 419 U.S. 1096 (1974). Summary judgment is also appropriate in cases involving fraud on the Patent Office. Pfizer, supra, and cases cited therein.

The propriety of summary judgment is merely the lack of any material issues of fact. As stated in Proler Steel Corp., Inc. v. Luria Brothers & Co., 417 F.2d 272, 273 (9th Cir. 1969):

"The propriety of granting summary judgment depends upon whether 'there is no genuine issue as to any material fact and...[omission in original] the moving party is entitled to a judgment as a matter of law', Rule 56(c), F.R.Civ.P."

Here there is no real issue of material fact. The evidence relied upon is well documented in the records of the Patent Office. The attorney who prosecuted the '480 application for Sanders had knowledge of the Althouse patent for more than two years before the '480 patent was issued. He concealed the existence of Althouse from the Examiner and continued to distinguish the alleged invention from other references on the basis of elements clearly shown in the concealed patent.

E. Sears and Atari are entitled to attorney's fees

Title 35 United States Code, Section 285 provides that the Court can award reasonable attorney's fees to the prevailing party in an exceptional case even without a finding of fraud. Strassheim v. Gold Metal Furniture, 477 F. 2d 818 (7th Cir. 1973)

Sander's fraud makes this case truly exceptional. Having obtained the patent by fraud and inequitable conduct, Sanders joined with Magnavox in filing and maintaining the present suit, thereby placing an unfair and inequitable burden of defense on Sears and Atari.

IV. CONCLUSION

In view of the facts and arguments presented above, it is submitted that the instant motion should be granted and that the patents in suit should be declared invalid and/or unenforceable with an award of reasonable attorney's fees to Sears and Atari.,

Lee & Smith
Ten S. Riverside Plaza - Suite 330
Chicago, Illinois 60606
(312) 726-1982

IN THE UNITED STATES DISTRICT COURT FOR THE

SOUTHERN DISTRICT OF NEW YORK

MIDWAY MANUFACTURING COMPANY:		Deposition of
vs.	:	Ralph Baer
THE MAGNAVOX COMPANY	:	ELEVENTH DAY
and	:	74 Civ 1657 CBM
SANDERS ASSOCIATES, INC.	:	

- - - - - - - - - - - - - - - -

IN THE UNITED STATES DISTRICT COURT FOR THE

NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION

THE MAGNAVOX COMPANY, et al	:	Consolidated Actions
vs.	:	74 C 1030 74 C 2510 75 C 3153 75 C 3933
BALLY MANUFACTURING CORPORATION, et al	:	

- - - - - - - - - - - - - - - -

Continued deposition taken pursuant to subpoena and notice at the Sanders Associates, Inc.; Headquarters; Spit Brook Road; Nashua, New Hampshire; Tuesday, February 17, 1976; commencing at ten o'clock in the forenoon.

I am asking you now to tell us what you as the person named as inventor in the 480 patent think you did that was new?

MR. WILLIAMS: That is a different question than you asked a few minutes ago. The first question was what he thought was new at the time of the original filing date of the patent application for the 480 patent and now, as I understand, the question is what he thinks or what he presently thinks he developed that was new.

THE WITNESS: Mr. Welsh, I believe you asked me what I thought was new at the time of the initial filing in January of 1968. In general, to the best of my recollection, what I thought was new was the creation of games playable on a raster scan TV type display in which one or more players, participants, could manipulate symbology on the screen through the manipulation of controls in such a way as to affect a variety of games. To the best of my recollection, I also conceived of the application of photoelectric detectors to the game of target shooting in which

the target is a stationary or moving symbol on the raster scan display. And I believe, without priming my memory by going back into 480, that the recognition of coincidence between two symbols co-located on the screen with some resultant indication or change in the game as a result of that co-location was also one of the features I envisioned. I also believe that the concept of playing games in cooperation with an incoming television or cable television transmission and the method for doing that; namely, the technique of crowbarring the antenna terminals and the extraction of synchronization signals from the TV set or raster scan display without reaching into its circuitry, was a part of my initial invention.

MR. WELSH: Could I have that answer, back, please?

(Whereupon, the previous answer was read back by the reporter.)

Q. Now, was what you just described what you today think you thought to be your invention at the time the

application was filed in January, 1968?

A. Yes.

195 Q. You used the term raster scan type TV display and stated that what you thought was new was creation of games playable on a raster scan TV type display; did you contemplate that terminology back in January of 1968 or did you really then just think of playing games on a TV set?

MR. WILLIAMS: Again, Mr. Baer, if you recall.

THE WITNESS: Well, I think we have been over that facet of what I thought I was doing at a much earlier time in the deposition and I guess I can only say that I simply don't recollect, certainly, at this point exactly what was on my mind.

196 Q. Well, did you then use the term raster scan TV type display when you were speaking of television sets?

A. I may or may not have.

197 Q. Wouldn't the basis of your idea be to find some use for standard television receivers which were so widely located in homes?

A. Yes, certainly, that was one of the primary motivations.

Q. So didn't you think in terms of the TV sets rather than raster scan type displays?

198

A. Well, again I would like to say, as far as I am concerned, they are synonymous.

Q. Well, even if you think they are synonymous today, the question is at that time did you not think in terms of TV receivers rather than raster scan type or TV type displays?

199

A. It is probably true at least at the very beginning back in '66.

Q. You prepared an invention disclosure form, did you not, in connection with the application for the 480 patent?

200

A. I must have, it is customary.

(Discussion off the record.)

MR. WELSH: I'd like to ask the reporter to mark as Exhibits 36-1 and 36-2 and 36-3 the three copies of this document which Mr. Williams just removed from the file marked D-2401 which appears to be the file of application

U.S. DEPARTMENT OF COMMERCE
Patent Office

Address Only: COMMISSIONER OF PATENTS
Washington, D.C. 20231

Art Unit 234
828 154

Trefton
Filed 1969

TELEVISION GAMING APPARATUS

Louis Etlinger
Sanders Associates Inc.
95 Canal St.
Nashua, N.H. 03060

Paper No. 10

Mailed SEP 16 1971

This is a communication from the Examiner in charge of your application.

Commissioner of Patents

☐ This application has been examined.

☑ Responsive to communication filed JULY 23, 1971.

☑ This action is made final.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTH(S) ___ DAYS FROM THE DATE OF THIS LETTER.

The following attachment(s) are part of this action:

a. ☐ Notice of References Cited, PO-892. b. ☐ Notice of Informal Patent Drawing, PO-948.

c. ☐ Notice of Informal Patent Application, PO-152. d. ☐

Summary of Action

1. ☐ Claims 1,3,5-10,13-28, 43,44,46,47,55,61,62-67,69,70,72,73,75,77-81,84,85,88-106 are presented for examination.

2. ☐ Claims 1,3,5-10,13-20,26,28,44,46,47,55,61-67,70,75,81,84,85,89,90,93-98 are allowed.

3. ☐ Claims 73 would be allowable if amended as indicated.

4. ☐ Claims 21-25, 43,69,72,77-80,88,91,92,99-106 are rejected.

5. ☐ Claims 73 are objected to.

6. ☐ Claims ___ are subject to restriction or election requirement.

7. ☐ Claims ___ are withdrawn from consideration.

8. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 OG. 213.

9. ☐ Since it appears that a discussion with applicant's representative may result in agreements whereby the application may be placed in condition for allowance, the examiner will telephone the representative within about 2 weeks from the date of this letter.

10. ☐ Other

FOL-326 (8/70)

158

Claims 21-25 are rejected under 35 USC 112 as indefinite for incompleteness. There is insufficient structure recited to support the functional statement of the whereby clause of the lasttwo lines of claim 21.

Claim 43 remains rejected for the reasons of the Office action of March 29, 1971.

Claim 69 remains rejected under 35 USC 112 for the re asons of the Office action of March 29, 1971. Applicant's arguments do not reveal the necessary teaching of how to use the light gun.

Claims 72,77,78,80,88, 100,102,106 are rejected under 35 USC 103 as unpatentable over Althouse. It would be obvious to multiply the number of video control sources for the Althouse display to produce any number of spots. A "score" on spot position coincidence would be readily apparant.

Claim 73 is objected to for depedence upon a rejected claim but would otherwise appear allowable.

Claim 79 is rejected under 35 USC 103 as unpatentable over Althouse in view of Ragen et al. It would be obvious to control the size of an Althouse spot in accordance with position in view of Ragen et al column 13, lines 59+. It would seem that this claim would not appear to distinguish over the televised broadcast of a bowling game.

159

Claim 91 is rejected under 35 USC 102 as anticipated by Ragen et al. Note Figure 25, H, V control means 151, integrators 153,155.

Claim 92 is rejected under 35 USC 102 as anticipated by Althouse. Elements 40 provide the control signals. Element 57 will operate upon the symbol between its range limits.

Claim 99 is rejected under 35 USC 112 as indefinite for having no surviving antecedent claim.

Claim 101 is rejected under 35 USC 103 as unpatentable over Althouse in view of Ragen et al. It would be obvious to generate plural spots with multiple Althouse systems. It would be obvious to place integrators across the Althouse control pots 40 in view of Ragen et al 155,153.

Claims 103-105 are rejected under 35 USC 112 as indefinite for having no structural connection for a triggering function.

Claim 106 is rejected under 35 USC 112 as indefinite for lacking structural basis for the claim to symbol position apart from generating the symbol anyway. The claim is functional at the alleged point of novelty.

This rejection is Final.

D. Trafton/mo
703-557-2863
9-3-71

DAVID L. TRAFTON
EXAMINER

160

IN THE UNITED STATES PATENT OFFICE

RECEIVED NOV 23 1971

GROUP 230

Applicant: William T. Rusch

Serial No.: 828,154 Group Art Unit: 234

Filed: May 27, 1969

For: Television Gaming Apparatus

Examiner: D. Trafton

Honorable Commissioner of Patents
Washington, D. C. 20231

AMENDMENT AFTER
FINAL REJECTION

Sir:

In response to the Office Action of September 16, 1971, please amend the above-mentioned application as follows:

In the Claims

Cancel Claims 43, 77 - 80, 91, 92 and 106.

Please amend Claims 21, 72, 88, 99, 103 and 104 as follows:

21. (twice amended) Apparatus for generating signals representing a "hitting" symbol and a "hit" symbol to be displayed on the screen of a television receiver, comprising:

means for synchronizing a television raster scan;

means for generating electrical signals representing a "hitting" symbol;

means coupled to said means for generating signals representing a "hitting" symbol for generating first and second control signals to vary the horizontal and vertical positions of said "hitting" symbol;

means for ascertaining coincidence between a "hitting" symbol and a "hit" symbol;

first means for differentiating a portion of the signal output of said first control signal generating means upon coincidence between said "hitting" symbol and said "hit" symbol;

second means for differentiating a portion of the signal output of said second control signal generating means upon coincidence between said "hitting" symbol and said "hit" symbol ;

first means for integrating said first differentiated signal for providing a first "hit" symbol control voltage;

second means for integrating said second differentiated signal and for providing a second "hit" symbol control voltage;

a "hit" symbol generator having as control inputs thereto said first and second "hit" symbol control voltages whereby said "hit" symbol moves with a velocity proportional to the velocity of a "hitting" when coincident therewith.

4572. (amended) Apparatus for playing a hockey type game upon the screen of a cathode ray tube, comprising:

means for displaying a first "hitting" spot;

means for displaying a second "hitting" spot;

means for displaying a "hit" spot;

means for controlling the position of said first and second "hitting" spots;

means for controlling the position of said "hit" spot including means for ascertaining coincidence between either of said "hitting" spots and said "hit" spot and means for imparting a distinct motion to said "hit" spot upon coincidence.

5186. (amended) Apparatus for generating symbols upon the screen of a television receiver to be manipulated by at least one participant, comprising:

means for generating a "hitting" symbol; and

means for generating a "hit" symbol including means for ascertaining coincidence between said "hitting" symbol and said "hit" symbol and means for imparting a distinct motion to said "hit" symbol upon coincidence.

Claim 99, line 1 — Change "45" to --44--.

Claim 103, line 3 — Delete "when triggered"

54. (amended) The combination of Claim 55 wherein said [triggering] means for causing said "hit" symbol to move back and forth across the screen includes a slow free-running multivibrator.

Remarks

The allowance of Claims 1, 3, 5 - 10, 13 - 20, 26, 28, 44, 46, 47, 55, 61-67, 70, 75, 81, 84, 85, 89, 90 and 93 - 98 is hereby acknowledged.

Claims 43, 77-80, 91, 92 and 106 have been cancelled without prejudice and without intent to disclaim any portion of the invention.

Reconsideration of the rejection of claims 21 - 25 under 35 USC 112 as indefinite for incompleteness is respectfully requested. Claim 21 has been amended to positively recite the structure of the means for ascertaining coincidence between the "hitting" and "hit" symbols.

Reconsideration of the rejection of Claim 69 under 35 USC 112 is respectfully requested. It is respectfully submitted that the claimed subject matter is adequately disclosed on pages 31 and 32 of the specification. The light gun is simply any housing having a light response device such as a photocell therein. The player aims at the displayed spot and if he aligns his "gun" with the spot the photocell provides an output. This output is coupled to flip-flop 122 instead of the output from the coincidence detector.

Claim 72 has been amended like Claim 44 to include the cooperating nature of a "hit" and "hitting" spots, particularly reciting that the motion of the "hit" spot is dependent upon the position (coincidence) of a "hitting spot" with the "hit" spot to impart motion thereto.

Claim 88 has been amended like allowed Claim 44 and recites similar limitations, however, Claim 88 recites the apparatus separately

not in combination with a television receiver. Applicant had intended to make this amendment in the previous response and left same out only as an oversight. Claims 100 and 102 are deemed patentable as being dependent upon Claim 88.

Claims 77 and 106 have been cancelled since the subject matter thereof is adequately covered elsewhere.

Claim 99 has been made dependent on allowed Claim 44.

Claim 101 is now deemed patentable since it is dependent upon Claim 88 which should be allowable in view of the amending of same with the same limitations as Claim 44.

Claims 103 and 104 have been amended to delete reference to the triggering function.

Claim 106 has been cancelled since the subject matter thereof is adequately covered elsewhere.

In view of the above, Applicant respectfully requests the allowance of Claims 21 -25, 69, 72, 73, 88 and 99 - 105, and the passing of this application to issue. If for any reason whatsoever the Examiner believes any remaining claims are not allowable, would he please contact Applicant's attorney so that the matter may be finally resolved by a telephone or personal interview at the Examiner's convenience.

Respectfully submitted,

Richard L. Seligman

November 10, 1971

Richard L. Seligman
Associate Attorney

Washington telephone 347-5577
Extension 55186

164

3074

Claims 1-13, 20-28, 38-67, 69, 70, 72, 73, and 77-90 are rejected under 35 U.S.C. 103 as unpatentable over Althouse in view of Moffitt, Ragen et al, Kiesling, Evans et al, and Goldsmith et al. Althouse discloses joystick control of a symbol on a TV display. While sinusoidal timing circuitry is shown, it would be obvious to substitute sawtooth waves as taught by Moffitt and Ragen et al. Note particularly figs. 20 and 24 of Ragen et al. Diode amplitude detectors are well known comparators when biased to some level intermediate minimum and maximum amplitude levels. Their use as Moffitt's comparator 27 or Ragen et al's comparators 55, 56 would be obvious. It would be obvious to employ image reversal to the Althouse display as taught by Kiesling Fig. 36. It would be obvious from Evans et al's teaching to modulate the Althouse modulation 77 for application to TV antenna terminals. And, it would be obvious to play games with the Althouse apparatus as taught by Goldsmith et al.

Claims 26-28, 44, 45, 66, 67, 70, 73, 75, 78 are rejected under 35 U.S.C. 112 as unsupported by sufficient disclosure of how to make and use the coincidence detecting means (83, 84). M.P.E.P. 608,01(p) advises that a copending application by

3.29.71

a different inventor may not ordinarily be relied on for essential disclosure.

Claim 69 is rejected under 35 U.S.C. 112 as unsupported by sufficient disclosure of how to make and use a light gun. The comment regarding M.P.E.P. 608.01(P) above applies.

Claim 77 is rejected under 35 U.S.C. 112 as unsupported by sufficient disclosure of the pinball embodiment means.

Claims 27, 28 are rejected under 35 U.S.C. 112 as unsupported by sufficient disclosure of sampling and gates.

Claims 21-28, 44, 45, 50-55, 65-67, 69, 70, 72, 73, 84, 85 are rejected under 35 U.S.C. 112 as indefinite for the uncertain meaning of "hit" and "hitting".

Claims 14-19 are objected to for their dependency on rejected claims but would appear allowable if rewritten is independent form.

Applicant is requested to update the references to application 697,798 at numerous points throughout the specification.

The letter to the Draftsman of November 24, 1970 has been approved.

3287

Upon reconsideration of the restriction requirement of November 10, 1970, the Examiner accepts Applicant's traversal as to groups I, III, IV and V as being examinable together, and the requirement as to these groups is withdrawn.

DAVID L. TRAFTON
EXAMINER

Trafton/jp

Area Code 703
557-2863
1/22/71

128

TO SCF

...LD TOP AND BOTTOM EDGES, SNAP-APART AT ... CARBON

ATTACHMENT TO PAPER NO. 6

U.S. DEPARTMENT OF COMMERCE
PATENT OFFICE

NOTICE OF REFERENCES CITED

(Use this form for supplemental citations
Prepare on additional sheets)

SERIAL NO.	GROUP ART UNIT
528154	234

APPLICANT(S)
RUSCH

U.S. PATENTS

	PATENT NO.	DATE	PATENTEE	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
1	2455992	12-48	GOLDSMITH et al	315	22	
2	2744761	5-56	ALTHOUSE	315	22.x	
3	3017625	1-62	EVANS et al	340	324A	
4	3156858	11-64	RAGEN et al	340	324A.x	
5	3249796	5-66	MOFFITT	315	22	
6	3497760	2-70	KIESLING	178	6.8 x	6-68
7						
8						
9						
10						
11						

FOREIGN PATENTS AND SPECIFICATIONS

	PATENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG.	PERTINENT PP SPEC.
1								
2								
3								
4								
5								
6								

OTHER REFERENCES (Include author, title, date, pertinent pages, etc.)

EXAMINER: DKTrapp | DATE: 1-71 | ☐ Check here if foreign exchange

APPLICATIONS

129

U.S. DEPARTMENT OF COMMERCE
Patent Office

Address Only: COMMISSIONER OF PATENTS
Washington, D.C. 20231

STRAFTON
A/C 703 557-2863

Art Unit 234
AUG. 21, 1969 851 865
RALPH H. BAER, ET AL.

Paper No. 4

Mailed

LOUIS ETLINGER
SANDERS ASSOCIATES, INC.
95 CANAL ST.
NASHUA, N. H. 03060

This is a communication from the Examiner in charge of your application.

Commissioner of Patents

☑ This application has been examined.

☐ Responsive to communication filed _____ ☐ This action is made final.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE THREE MONTH(S) ____ DAYS FROM THE DATE OF THIS LETTER.

PART I

The following attachments(s) are part of this action:

a. ☑ Notice of References Cited, Form PO-892. b. ☐ Notice of Informal Patent Drawing, PO-948.

c. ☐ Notice of Informal Patent Application, Form PO-152. d. ☐

PART II

Summary of Action

1. ☐ Claims 1-35 are presented for examination.
2. ☐ Claims 13, 16, 17, 19, 24 are allowed.
3. ☐ Claims _____ would be allowable if amended as indicated.
4. ☐ Claims 1-12, 15, 18, 20-23, 25-35 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ Claims 14 are withdrawn from consideration.
8. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 OG. 213.
9. ☐ Since it appears that a discussion with applicant's representative may result in agreements whereby the application may be placed in condition for allowance, the examiner will telephone the representative within about 2 weeks from the date of this letter.
10. ☐ Receipt is acknowledged of papers under 35 USC 119, which papers have been placed of record in the file.
11. ☐ Applicant's claim for priority based on an application filed in _____ on _____ is acknowledged. It is noted, however, that a certified copy as required by 35 USC 119 has not been received.
12. ☐ Other

83

Patent Office

PART III | GROUP ART UNIT 234 | SERIAL NUMBER 851865

NOTIFICATION OF REJECTION(S) AND/OR OBJECTION(S) (35 USC 132)

	CLAIMS (1)	REASONS FOR REJECTION (2)	REFERENCES * (3)	INFORMATION IDENTIFICATION AND COMMENTS (4)
1	1-12, 18, 21-23 25-30	35 USC 103	A V C + E	OBVIOUS TO REFER TO A 43 ... AS DELAY MEANS SUCH AS C TEACHES. OBVIOUS TO USE E ... CARRIER SYSTEM WITH A.
2	15, 20	35 USC 112		INDEFINITE BECAUSE "SUCH THAT" CLAUSE HAS NO STRUCTURAL SUPPORT.
3	31-35	35 USC 103	D V. I	OBVIOUS TO USE BIAS LIGHT OF I WITH D ... GUN.
4				
5				

6. CLAIMS 13, 16, 17, 19, 24 ALLOWED.

7. RESTRICTION REQ'T. RE CLAIM 14 MADE FINAL. RESTRICTION REQ'T. RE CLAIM 23 WITHDRAWN.

8. ASSIGNEE OF 697,798; 828,154; 851,865 IS RESPONSIBLE FOR MAINTAINING LINE OF DEMARCATION AMONG CLAIMS OF EACH SINCE INVENTORS DIFFERENT (MPEP 305, 804.03).

* Capital letters representing references are identified on accompanying Form PO-892.
The symbol "v" between letters represents—in view of—.
The symbol "+" or "&" between letters represents—and—.
A slash "/" between letters represents the alternative—or—.

NOTE: Sections 100, 101, 102, 103 and 112 of the Patent Statute (Title 35 of the United States Code) are reproduced on the back of this sheet.

2

TEL. 703-557-2863

84

DAVID L. TRAFTON
EXAMINER

FOLD TOP AND BOTTOM EDGES, SNAP APART AND DISCARD CARBON

ATTACHMENT TO PAPER NO. 4

U.S. DEPARTMENT OF COMMERCE
PATENT OFFICE

SERIAL NO. 851865

GROUP ART UNIT 234

APPLICANT(S) BAER et al.

NOTICE OF REFERENCES CITED

(Use this is a supplemental citation
please on additional folder)

U.S. PATENTS

	PATENT NO.	DATE	PATENTEE	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
A	2847661	8-58	ALTHOUSE	315	22 x	
B	3158858	11-64	RAGEN et al.	340	324A x	
C	2595646	5-52	DOBA et al.	340	324A x	
D	3189889	6-65	BRIDGETT	340	324A	
E	3017625	1-62	EVANS et al.	340	324A	
F	2455992	12-48	GOLDSMITH et al.	315	22	
G	3249796	5-66	MOFFITT	315	22	
H	3497780	2-70	KIESLING	178	6.8 x	(6-65)
I	3334236	8-67	BACON	250	217 CR	)
J						
K						

FOREIGN PATENTS OR PUBLISHED APPLICATIONS

	PATENT NO.	DATE	COUNTRY	NAME	CLASS	SUB-CLASS	PERTINENT SHTS. DWG.	PERTINENT NO. SPEC.
L								
M								
N								
O								
P								
Q								

OTHER REFERENCES (Include author, title, date, pertinent pages, etc.)

R

S

T

U

EXAMINER D Knafton | DATE 3-71 | ☐ Check here if foreign exchange

*ATTENTION R.O.S: DO NOT FURNISH COPY IF THIS BOX IS CHECKED.

85

IN THE UNITED STATES PATENT OFFICE

Inventor: Ralph H. Baer, et al

Serial No.: 851,805 Group Art Unit: 234

Filed: August 21, 1969

For: Television Gaming Apparatus and Method

Examiner: D.L. Trafton

Honorable Commissioner of Patents
Washington, D.C. 20231

AMENDMENT "B"

Sir:

In response to the Office Action of April 26, 1971, please amend the above identified application as follows:

In the Specification

Page 2, line 23 Delete "and Method".

line 24 Before "Serial" insert --Serial No. filed March 22, 1971, a continuation of--.

Page 9 line 3 Delete "697,798"

Page 42 line 9 Delete "697,798"

line 12 Delete "697,798"

In the Claims

Cancel Claims 7, 9 and 14.

Please amend Claims 1, 2, 5, 6, 8, 15, 18, 20-23, 28 and 34 as follows:

1. (Amended) In combination with a standard television receiver, apparatus for generating signals representing a symbol to be displayed on the screen of said television receiver, comprising:

means for generating horizontal and vertical sync signals;

means for generating first and second pulse trains having pulse repetition frequencies equal to the frequencies of said sync signals;

first and second voltage controlled delay circuits coupled to said

means for summing the output from said coupling means and said sync signals;

an RF oscillator;

means for modulating the output of said RF oscillator with said summed signal; and

means for applying said modulated signal to said television receiver.

Claim 34 Line 5 After "target" insert --from a distance--.

Remarks

The allowance of Claims 13, 16, 17, 19 and 24 is hereby acknowledged.

Claim 14 has been cancelled and may be made the subject of a divisional application.

Reconsideration of the rejection of Claims 1-12, 18, 21-23 and 25-30 as unpatentable over Althouse in view of Doba et al and Evans et al under 35 USC 103 is respectfully requested.

Claim 1, as amended, is deemed patentable over the references. Claim 1 recites first and second voltage controlled delay circuits having independent voltage control signals coupled thereto, which change the position of the symbols at an exponentially decreasing travel rate. None of the references suggest this arrangement. Neither Althouse nor Doba et al provide for independent voltage control which is adjustable in amplitude and alters speed of response. Both references change spot position using only a simple potentiometer control so that spot position appears to change instantly. Contrast this to Applicants' voltage control where response is altered to cause

the dots to change position in a sluggish fashion. This allows Applicants to use the symbols for playing many games, the playing of which would be impractical with instant response spot positioning. Further, many games are imitative of "real" games wherein such moving items as balls, pucks, etc. display an exponential or sluggish response to a stimulant such as a bat. Applicants' control voltage sluggishness essentially simulates this "real" game response.

Claims 2-4 are deemed patentable for the reasons advanced re that the patentability of their parent claim, Claim 1. The claims further limit Applicants' delay circuits. These simple four transistor dot generators are patently distinct from the complex circuits of Althouse and Doba, Jr. et al. For example, Doba, Jr. requires at least a dozen transistors (4 multivibrators, 4 amplifiers, etc.) to display their picture area.

Claims 5, 6, 8, 10 and 12 are directed to various voltage controls which cause the spot to travel in a sluggish fashion either by manipulation by an operator or automatically. The simple instantaneous positioning taught by the references certainly do not anticipate these claims. Only Applicants who wish to simulate masses in motion have set forth the practical means for accomplishing same.

Claims 18, 21, 22, 23 have been amended like Claim 1 and deemed patentable for the same reasons advanced above.

Certainly, the apparatus recited in Claims 25-27 directed to Figs. 14 and 15 have no counterpart in the references and describe unique games never previously shown.

Claim 28 has been amended in like fashion to Claim 1.

Claim 29 sets forth apparatus for generating round dots on the TV screen and not anticipated by the square dot generators of the references.

Claim 30 recites apparatus describing Applicants Fig. 20 embodiment and here also no reference anticipates spot size change with position.

11. 96

Reconsideration of the rejection of Claims 15 and 20 under 35 USC 112 is respectfully requested. These claims have been amended to positively claim elements previously set forth inferentially.

Reconsideration of the rejection of Claims 31-35 as unpatentable over Bridgett in view of Bacon under 35 USC 103 is respectfully requested.

The game recited in Claims 31-33 is not anticipated by the reference which merely shows conventional light gun to edit storage and means for biasing the photocell. Applicants' invention does not therein lie but rather in the particular combination of generated targets and shooting means. The references certainly do not hint at the recited moving target which changes direction when hit. Further, biasing of a photocell allows target shooting games to be played virtually independent of room illumination, which is not a consideration in light-pens customarily held against the CRT face.

Claim 34 has been amended to recite that the target is "shot" at from a distance and not like the Bridgett gun for editing storage wherein the light gun used is placed in physical contact with the CRT face.

The other references of record have been examined and are deemed not pertinent to Applicants' schemes for playing games on television receivers. Ragen et al and Moffitt relate to coincidence circuits not akin to anything Applicants are doing. Goldsmith obtains ballistic paths through special deflection plates and not through voltage control in a raster scan TV display. Kiesling's folds back the electron beam path of a vector-writing CRT whereas Applicants' wall bounce results in control voltages for a symbol generator.

In view of the above, Applicants request the allowance of Claims 1-6, 8, 10-12, 14, 15, 18, 20-23, and 25-35 and the passing of this case to issue.

Respectfully submitted,

Richard I. Seligman

Richard I. Seligman
Associate Attorney

July 7, 1971
Washington Telephone 347-5577
Extension 5-5186

12.

97

Carolyn Edwards 9/C
8-11-71

RECEIVED AUG 5 1971

GROUP 230

IN THE UNITED STATES PATENT OFFICE

Applicant: William T. Rusch

Serial No.: 828,154 Group Art Unit: 234

Filed: May 27, 1969

For: Television Gaming Apparatus

Examiner: D. L. Trafton

Honorable Commissioner of Patents
Washington, D. C. 20231

AMENDMENT B

Sir:

In response to the Office Action of March 29, 1971, whose response time has been extended one month, please amend the above-mentioned application as follows:

In the Specification

Change the title to -- "Television Gaming Apparatus"

Page 3, line 3 Delete "and Method" and substitute therefor --"Serial No. 124,566 filed March 22, 1971 a continuation of ---

Page 9, line 9 Delete "697, 798"

Page 15, line 1 Delete "697, 698"

Page 16, line 15 After "1968" insert--, now Patent No. 3,497,829 --

Page 17, line 19 Delete "697, 798"

Page 18, line 2 Delete "697, 798"

C1

C1
132

in either the horizontal or vertical axis, such that in one direction, either horizontal or vertical, the slave spot will follow the primary spot.

Claims 81, 84, 85, 88, 89 and 90 are deemed patentable for the same reasons advanced regarding the earlier argued claims. These claims contain the same limitations of either Applicant's unique back-to-back diode slicing or his "hit" symbol generating means. These claims, however, recite the apparatus for generating the symbols without reciting the combination with a television receiver.

Once again, Applicant deems the claims, as amended, and currently remaining, in the application as patentable over the references of record taken singularly or in combination.

Althouse is merely directed to the positioning and display of small rectangular spots on a CRT raster display representing coordinate data points. He only moves the spots around to position them and he never has any cooperation between plural spots.

Moffitt adds little to Althouse and only suggests a circuit for comparing sawtooth ramps to provide narrow pulses.

The Examiner seems to be implying that the Ragen et al coincidence gated slices of sawtooth waveforms is like Applicants time delay circuits. However, both the objectives and circuit implementation are entirely different. Ragen et al needs unblanking signals whose duration and timing are related to certain positions in a radial sweep and he gets these signals by the ramp and gate waveform coincidence (comparator) circuits. Applicant's dual diode slicer compares a D.C. level with a sawtooth during the length of time required to pass through two diodes forward voltage drops which is approximately constant. Also, Applicant does not simply use the gate signal as an unblank signal but rather ac couples it to get a bell shaped

established that the applicant may be his own lexicographer and in this particular application the words selected most aptly describe the invention.

In view of the above Applicant respectfully request the allowance of all the claims currently under consideration and the passing of this case to issue.

Respectfully submitted,

Richard I. Seligman
Patent Attorney

July 21, 1971
Washington Telephone 347-5577
Extension 5-5186

Citation of Art
3-15-72

FEB 2 1972-13

FEB 2 1972 U.S. PATENT OFFICE

IN THE UNITED STATES PATENT OFFICE

Applicant: Ralph H. Baer

Serial No.: 126,960 Group Art Unit: #233

Filed: March 22, 1971

For: Television Gaming and Training Apparatus

Honorable Commissioner of Patents
Washington, D. C. 20231

Citation of Reference

Sir:

Applicant hereby submits as a reference under the provisions of M.P.E.P. 707.05(b) the following a copy of which is enclosed herewith:

French Patent No. 1.180.470, published June 4, 1959.

Remarks

Applicant respectfully submits that said French Patent No. 1.180.470 does not anticipate Applicant's claimed invention. A translation of said French Patent is enclosed. To the best of Applicant's knowledge the translation is accurate.

Applicant has "discovered" a novel and patentable use for a standard television receiver whereby the general public may employ the television receivers in their homes for other than viewing telecast material displayed on the screens thereof. This novel discovery is that the standard television receiver used in the home can be further employed for the playing of games and other similar activities. This is accomplished by having the viewer generate his own signals to display symbols on the television receiver and manipulate those symbols to play games and to carry out on various educational activities.

There are roughly 60 million homes having television receivers in

the United States. These receivers are used in the main only for viewing broadcast programs. Yet, the marketplace is inundated with apparatus to be used in the home for occupying man's leisure time. Such apparatus as pool tables and ping pong tables are relatively costly yet are being bought in great quantities. Also employed in the home in even greater quantities are various devices for the amusement of children, the cost of which per average family can be very high. Nevertheless, in this environment, until Applicant's discovery, no one conceived of using a television receiver for the playing of games.

Applicant has conceived of a general result which was previously unknown to those skilled in the art. Yet, the television field is one in which a great amount of competition exists, wherein each little innovation gives a competitive advantage to one television manufacturer over the other. Now, along comes Applicant with not a little innovation in the television field but an entirely new concept greatly expanding the use of home television receivers.

Applicant, by his disclosure, adds to the sum of human knowledge by providing a new and useful result which has never been achieved before.

Viewing the history of the television art for the home consumer, we start with the basic use of the television set to receive programs generated externally to the home. The next step in the history of consumer television is to again use the television receiver as a passive device. However, now the consumer generates the programs internal to the home, for example, by taping home activities and displaying them on the television receiver. In this same vein, television receivers are also used in a passive sense again to display regular 35mm slides.

Now from these passive uses of the television receiver we arrive at Applicant's use wherein the receiver is used in an active mode by the home viewer whereby he generates his own pictorial content on the screen of the television receiver and moves the pictorial content about in order to play games. This use of the receiver is a new breakthrough in the art and in view of Applicant's licensing in this area no doubt this will blossom forth into an entirely new and commonly used consumer product.

Devices proposed by Applicant will be used with television receivers already in the home merely by attaching the outputs from the devices to the input (antenna terminals) of the television receiver, or may be built right into the body of receivers, which receivers will be sold as both passive and active devices.

In a first embodiment, applicant provides a control unit which generates horizontal and vertical synchronization signals, generates a video signal representing "dots" to be displayed on the screen of a television, provides means whereby the user can move the "dots" about the television screen and provides means for coupling the signals to a television receiver.

With this apparatus a person or persons can display "dots" on his home television receiver and move the "dots" about the screen of the receiver to, for example, play games. In this embodiment, he carries out this activity independent of any outside influence. Each person having the equipment can play games on his own home television receiver independently of any television station and independently of what any other person is doing with his television receiver and without influencing the presentations on any other television receivers.

In a second embodiment, the control unit of the first embodiment is

built into the television receiver by the manufacturer and the unit is sold as both a passive device to view telecasts and an active device to play games.

In a third embodiment, the control unit is also built into the receiver, however, rather than generate its own synchronization signals it uses synchronization signals which are, for example, broadcast by a regular television station. It can use the broadcast sync signals and "throw away" the broadcast video or can use both. That is, the broadcast video can be used as for example, background.

None of these embodiments or any other embodiments of Applicant's invention are related to the disclosure set forth in the aforementioned French Patent No. 1.180.470. However, the original application Serial No. 697,798 of which subject application is a continuation did have a couple of claims which read on the French Patent even though the French Patent is for an entirely different invention.

French Patent No. 1.180.470 discloses apparatus for generating video signals representing a movable index which is mixed with the video generating the rest of the picture. Obviously, the index would be used to "point" to some particular part of the picture where the viewer's attention are to be directed. This index is generated either at a broadcast station or a closed circuit transmitter and the index will be displayed on each of the receivers tuned to the broadcast station or coupled to the closed circuit transmitter.

Each viewer does not generate and manipulate his own index and every set receives and displays the transmitted index.

Although Applicant's invention is very much different from the invention set forth in the French Patent, it was necessary to carefully claim

Applicant's invention so as not to read on the French Patent since both inventions were broadly related to television.

With the above comments in mind, the Examiner's attention is now directed to Applicant's claims and in particular to the independent claims of the application.

Applicant's Claims 1 and 31 recite "means for coupling the generated signals only to said television receiver whereby said "dots" are displayed only upon the screen of said receiver being viewed by the participant" (emphasis supplied.) This limitation particularly emphasizes the fact that Applicant's apparatus generates "dots" only on his own receiver and does not influence presentations on any other receiver. Contrast this to the French Patent wherein the apparatus described therein provides an index for all receivers coupled thereto and the individual viewer has no control of the presentation of the index nor any control of the positioning of same.

Claim 39 recites that the signals are coupled only to a single receiver and not to all receivers receiving the transmitted signals.

Claim 44 recites that the viewer controls the "dots" position on only his television receiver and does not influence other receivers.

Claim 47 recites apparatus for playing games by a viewer only on his receiver.

Claim 48 recites the built in version of Applicant's device wherein the "dot" generating video signals are responsive to synchronization signals and generate "dots" only on the receiver in which the device is "installed".

Accordingly, Applicant respectfully submits that Claims 1-50 are patentable over and in no way anticipated by said French Patent No. 1,180,470.

Respectfully submitted,

Richard I. Seligman
Associate Attorney

Encl.

January 28, 1972
Washington Telephone 347-5577
Extension 5-5186

IN THE UNITED STATES PATENT OFFICE

Applicant: Ralph H. Baer

Serial No.: 126,966 Group Art Unit: 233

Filed: March 22, 1971

For: Television Gaming and Training Apparatus

Attention: Examiner Richard Murray

Honorable Commissioner of Patents
Washington, D. C. 20231

Amendment "A"

Sir:

In response to the Office Action of August 10, 1972, please amend the above-identified application as follows:

In the Claims

Cancel Claims 44 - 48.

Please amend Claims 1, 28, 30, 31, 39 and 49 as follows:

1. (amended) In combination with a standard television receiver, apparatus for generating "dots" upon the screen of the receiver to be manipulated by a participant, comprising:

a control unit for generating signals representing the "dots" to be displayed, said control unit further including means for generating synchronizing signal to synchronize the [for synchronizing a] television raster scan of said receiver and means for manipulating the position of the "dots" on the screen of said receiver; and

means for directly coupling the generated signals only to said television receiver whereby said "dots" are displayed only upon the screen of said receiver being viewed by the participant.

28. (amended) Television gaming apparatus as defined in Claim 26, 27 further including means for causing one of said "dots" to disappear when [a "hit" is made] said "shooting" means receives light from a displayed "dot".

Claim 32, line 1 After "including" insert --means for receiving--,

Claim 32, line 10 After "for" insert --directly--.

41 (amended) Apparatus for generating "dots" upon the screen of a television receiver to be manipulated by a participant, comprising:

a control unit for generating signals representing the "dots" to be displayed, said control unit further including means for generating synchronizing signals to synchronize a television raster scan of a receiver and means for manipulating the position of the "dots" on the screen; and

means for directly coupling the generated signals only to a single television receiver whereby said "dots" are displayed only upon the screen of the single receiver being viewed by the participant.

Claim 47, line 1 Change "48" to --51--.

Please insert new Claim 51 as follows:

47--51. Apparatus for use within a television receiver, which receiver includes horizontal and vertical deflection circuitry which is synchronized with horizontal and vertical synchronizing signals, said apparatus including means for generating "dots" upon the screen of said receiver to be manipulated by a participant, comprising:

a control unit responsive to the horizontal and vertical synchronizing signals for generating signals representing "dots" to be displayed, including means for manipulating the position of the "dots" on the screen of said receiver whereby said "dots" are displayed only upon the screen of said receiver.--

Remarks

Applicant wishes to express his appreciation to the Examiner for the courtesy extended by him to Applicant and his Attorney at the interview on October 17, 1972.

Pursuant to the agreement reached at the interview with Examiner Murray, Applicant has amended the claims such that the invention is

not anticipated by the cited references under 35 USC 103. It was agreed at the interview that the invention as recited in the amended claims is not taught by the references of record.

Applicant has cancelled Claims 44 - 48 without prejudice and without intent to disclaim any portion of the invention.

Reconsideration of the rejection of Claims 14 - 23, under 35 USC 112 as being vague and indefinite is respectfully requested. It is respectfully submitted that the recitation of "crowbar" does not render the claim vague and indefinite since there is a definite reference to same in the specification. The Examiner's attention is directed to Figure 5E and the description thereof beginning on line 17 of page 15 of the specification.

Reconsideration of the rejection of Claim 28 as rejected under 35 USC 112 as being vague and indefinite is respectfully requested. Applicant has deleted the objected to word "hit" and substituted therefor a definition in the claim of what the word "hit" means in this instance.

Reconsideration of the rejection of Claim 30 under 35 USC 112 as being vague and indefinite is respectfully requested. Applicant has amended Claim 30 to recite "means for receiving background information", and it is Applicant's contention that it is not necessary to recite a cooperating television transmitter but only recite that the television claimed in Claim 1 which Claim 30 is dependent thereon has means for receiving background information generated by a cooperative television station.

Reconsideration of the rejection under 35 USC 103 of the independent claims as being unpatentable over the French Patent 1,180,470 and the dependent claims as being unpatentable over said French patent taken with the secondary references is respectfully requested. Applicant has amended Claims 1, 31 and 39 in the manner agreed to with the Examiner so as to particularly point out that the invention as claimed is not

anticipated by this French patent which discloses apparatus for generating a marker on a television screen and to particularly avoid any broadcast situation. It is to be emphasized that Applicant generates his dots only on the set of the receiver being viewed by the participant who manipulates the dots. The dependent claims are deemed allowable for the same reasons advanced regarding the allowability of their parent claims.

New Claim 51 is substituted for Claim 48 wherein the control unit is built in as a part of a television receiver. In accordance with the agreement with the Examiner, Claim 48 has been rewritten as Claim 51 using the limitations found in Claim 31.

Applicant has also cancelled Claims 44-46, as agreed to at the aforementioned interview.

Accordingly, since the claims of the application have been amended in the manner agreed to by the Examiner, Applicant respectfully requests the allowance of the remaining claims of the application and the passing of this case to issue.

Respectfully submitted,

Richard I. Seligman

Richard I. Seligman
Associate Attorney

October 18, 1972
Washington telephone 347-5577
Extension 55186

Prosecution History of Claims Leading to Claim 1 of U.S. Patent 3,728,480

1. (Filed 1/15/68 in S.N. 697,798) In combination with a standard television receiver, apparatus for generating "dots" upon the screen of the receiver to be manipulated by participants, comprising:

a control unit for generating signals representing "dots" to be displayed; and

means for coupling the generated signals to the television receiver.

1. (Amended 2/27/70) In combination with a standard television receiver, apparatus for generating "dots" upon the screen of the receiver to be manipulated by participants, comprising:

a control unit for generating signals representing the "dots" to be displayed, including means for manipulating the position of the of the "dots" on the screen of the receiver; and

means for coupling the generated signals to the television receiver.

1. (Amended 8/5/70) In combination with a standard television receiver, apparatus for generating "dots" upon the screen of the receiver to be manipulated by participants, comprising:

a control unit for generating signals representing the "dots" to be displayed, said control unit including means for synchronizing a television raster scan and means for manipulating the position of the "dots" on the screen of the receiver; and

means for coupling the generated signals to the television receiver.

1. (Filed 3/22/71 in S.N. 126,966) In combination with a standard television receiver, apparatus for generating "dots" upon the screen of the receiver to be manipulated by a participant, comprising:

a control unit for generating signals representing the "dots" to be displayed, said control unit including means for synchronizing a television raster scan and means for manipulating the position of the "dots" on the screen of said receiver; and

means for coupling the generated signals only to said [the] television receiver whereby said "dots" are displayed only upon the screen of said receiver being viewed by the participant.

1. (Amended 10/24/72) In combination with a standard television receiver, apparatus for generating "dots" upon the screen of the receiver to be manipulated by a participant, comprising:

a control unit for generating signals representing the "dots" to be displayed, said control unit further including means for generating synchronizing signal to synchronize the [for synchronizing a] television raster scan of said receiver and means for manipulating the position of the "dots" on the screen of said receiver; and

means for directly coupling the generated signals only to said television receiver whereby said "dots" are displayed only upon the screen of said receiver being viewed by the participants.